Contents Volume 54, 1991/92

Preface vii
Proterozoic salt basins of the Persian Gulf area and their role in hydrocarbon generation
H.S. Edgell (Dhahran, Saudi Arabia) 1
Burial and thermal history of Proterozoic source rocks in Oman
W. Visser (Rijswijk, The Netherlands) 15
The Riphean sedimentary basins of the Eastern Siberia Province and their petroleum potential
V.S. Surkov, M.P. Grishin, A.I. Larichev, V.I. Lotyshev, N.V. Melnikov, A.Eh. Kontorovich, A.A. Trofimuk (Novosibirsk, USSR) and A.N. Zolotov (Moscow, USSR) 37
The Sichuan Basin, southwest China: a Late Proterozoic (Sinian) petroleum province
R.J. Korsch (Canberra, A.C.T., Australia), Mai Huazhao, Sun Zhaocai (Wuxi, Jiangsu, PR China) and J.D. Gorter (Claremont, W.A., Australia) 45
Sulfur/carbon ratios and extractable organic matter of the Middle Proterozoic Nonesuch Formation, North American Midcontinent rift
G.B. Hieshima and L.M. Pratt (Bloomington, IN, USA) 65
Sedimentology and carbonsulphur geochemistry of the Velkerri formation, a mid-Proterozoic potential oil source in northern Australia
M.J. Jackson (Canberra, A.C.T., Australia) and R. Raiswell (Leeds, UK) 81
High element mobility in 1.9–1.86 Ga hydrothermal alteration zones, Bergslagen, central Sweden: relationships with exhalative Fe-ore mineralizations
P.A. de Groot and J.H. Baker (Utrecht, The Netherlands) 109
Stable istope geochemistry of early Proterozoic carbonate concretions in the Animikie Group of the Lake Superior region: evidence for anaerobic bacterial processes
B.L. Winter and L.P. Knauth (Tempe, AZ, USA) 131
The palaeomagnetism of major (Middle Proterozoic) igneous complexes, south Greenland and the Gardar apparent polar wander track
J.D.A. Piper (Liverpool, UK) 153
Repetitive cyclical volcanism in the Late Archean Larder Lake Group near Kirkland Lake, Ontario: implications of geochemistry on magma genesis
N. Blum and J.H. Crocket (Hamilton, Ont., Canada) 173
The Aldan Shield of Siberia, USSR: the age of its Archaean components and evidence for widespread reworking in the mid-Proterozoic
A.P. Nutman (Canberra, A.C.T., Australia), I.V. Chernyshev (Moscow, USSR), H. Baadsgaard (Edmonton, Alta., Canada) and A.P. Smelov (Yakutsk, USSR) 195
Isotope and rare earth element evidence for a late Archaean terrane boundary in the southeastern Pilbara Craton, Western Australia
I.M. Tyler, I.R. Fletcher (East Perth, W.A., Australia), J.R. de Laeter (Perth, W.A., Australia), I.R. Williams and W.G. Libby (East Perth, W.A., Australia) 211
A comparative study of the geochemical and isotopic systematics of late Archaean flood basalts from the Pilbara and Kaapvaal Cratons
D.R. Nelson, A.F. Trendall (East Perth, Australia), J.R. de Laeter (Perth, Australia), N.J. Grobler (Bloemfontain, South Africa) and I.R. Fletcher (Perth, Australia) 231
Evidence for the transition to an oxygen-rich atmosphere during the evolution of red beds in the Lower Proterozoic sequences of southern Africa
P.G. Eriksson (Pretoria, South Africa) and E.S. Cheney (Johannesburg, South Africa) 257
Microfossils and possible microfossils from the Early Archean Onverwacht Group, Barberton Mountain Land, South Africa
M.M. Walsh (Baton Rouge, LA, USA) 271
Proterozoic collisional basins in a Pan-African suture zone, Anti-Atlas Mountains, Morocco, K.P. Hefferan, J.A. Karson (Durham, NC, USA) and A. Saquaque (Marrakech, Morocco) 295

Book Reviews

Precambrian Continental Crust and its Economic Resources by S.M. Naqvi — D.R. Hunter 321

Absolute Age Determination, Physical and Chemical Dating Methods and Their Application by M.A. Greyh and H. Schleicher — G.S. Odin 323
Precambrian Geology: The Dynamic Evolution of the Continental Crust by A.M. Goodwin — D.R. Hunter 324